

Building Grounds Lighting

Jim Benya, PE, LC
Benya Lighting Design



Description

- Building grounds lighting includes lighting for landscape, pedestrian walkways, patios and other area lighting.
- Title 24 to include building grounds LPD.
- LPD maximums may vary by four environmental zones.
- LPD may be based on ETAL procedure.
- May consider lighting controls during day and curfew hours.



Benefit

- Save electric energy and demand.



Enforcement Mechanism

- Implemented as part of Title 24 building energy efficiency standards.
- May include mandatory shielding requirements.
- May include lighting controls (day, pre-curfew and curfew) for environmental zones.
- Prescriptive requirement may set maximum LPD limits.



Performance Verification

- Needed for any lighting controls and luminaire shielding requirements.
- Lighting controls require calibration such that lighting equipment is energized only from dusk to curfew or dawn.
- Ensure security lighting is only energized during designated hours



Cost Effectiveness

- Models may develop maximum LPD demonstrated for each environmental zone using IESNA or ETAL procedures.
- Limits on disability and discomfort glare may be assumed for each model.

